

## SEMICONDUCTOR INTEGRATED CIRCUIT HAVING VOLTAGE-DOWN CIRCUIT REGULATOR AND CHARGE SHARING

### ABSTRACT OF THE DISCLOSURE

5           An integrated circuit is provided, which includes first, second and third  
power supply conductors. The second power supply conductor has a higher  
voltage than the first power supply conductor, and the third power supply  
conductor has a higher voltage than the second power supply conductor. A high  
voltage power supply decoupling capacitor is coupled between the first and third  
10 power supply conductors. A low voltage power supply decoupling capacitor  
coupled between the first and second power supply conductors. A voltage reducer  
is coupled between the second and third power supply conductors. A plurality of  
semiconductor devices is biased between the first and second power supply  
conductors.

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